

JUL 26 2006

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## PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method for directing communication between a subscriber station and a plurality of sectors in a data communication system, comprising:

determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list;

determining at the subscriber station a quality related to a reverse link quality metric for each sector in the subscriber station's list; and

directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric,

wherein said directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric comprises:

assigning credits to each sector in the subscriber station's list except a current serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric; and

directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits, and

wherein said assigning credits to each sector in the subscriber station's list except a current serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric comprises:

comparing a forward link quality metric for a non-serving sector with a forward link quality metric for the current serving sector modified by a first threshold;

comparing a quality related to a reverse link quality metric of the non-serving sector with a second threshold;

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comparing a quality related to a reverse link quality metric of the current serving sector with the second threshold; and

determining whether to increase or decrease credits of the non-serving sector in accordance with results of said comparisons.

2. (Original) The method as claimed in claim 1, wherein said data communication system comprises a wireless data communication system.
3. (Original) The method as claimed in claim 1, wherein said determining at the subscriber station a quality metric of a forward link for each sector in the subscriber station's list comprises measuring a signal-to-noise-and-interference-ratio of the forward link.
4. (Original) The method as claimed in claim 3, wherein said measuring a signal-to-noise-and-interference-ratio of the forward link comprises measuring a signal-to-noise-and-interference-ratio of a pilot signal on the forward link.
5. (Original) The method as claimed in claim 4, wherein said measuring a signal-to-noise-and-interference-ratio of a pilot signal on the forward link comprises measuring a signal-to-noise-and-interference-ratio of a non-continuous pilot signal on the forward link.
6. (Original) The method as claimed in claim 1, wherein said determining a quality related to a reverse link quality metric for each sector in the subscriber station's list comprises:  
ascertaining at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list; and  
processing at the subscriber station said ascertained first signal value for the each sector in the subscriber station's list.
7. (Original) The method as claimed in claim 6, wherein said ascertaining at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list comprises ascertaining at the subscriber station a reverse power control

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bit at a reverse power control channel of the forward link for each sector in the subscriber station's list.

8. (Original) The method as claimed in claim 6, wherein said processing at the subscriber station said ascertained first signal value for each sector in the subscriber station's list comprises filtering said ascertained signal value by a filter with a pre-determined time constant.

9. (Cancelled)

10. (Cancelled)

11. (Currently Amended) The method as claimed in claim [[10]] 1, wherein said determining whether to increase or decrease credits of the non-serving sector in accordance with results of said comparisons comprises:

increasing credits of the non-serving sector by a first pre-determined amount if:

the quality related to a reverse link quality metric of the non-serving sector is less than the second threshold and the quality related to a reverse link quality metric of the current serving sector is greater than the second threshold; or if:

the quality related to a reverse link quality metric of the non-serving sector is less than the second threshold and the quality related to a reverse link quality metric of the current serving sector is less than the second threshold and the forward link quality metric for the non-serving sector is greater than the forward link quality metric for the current serving sector modified by the first threshold; and

decreasing credits of the non-serving sector by a second pre-determined amount if:

the forward link quality metric for the non-serving sector is less than the forward link quality metric for the current serving sector modified by the first threshold; or if:

the quality related to a reverse link quality metric of the non-serving sector is greater than the second threshold.

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12. (Currently Amended) The method as claimed in claim [[10]] 1, wherein said directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits comprises:

determining sectors with said assigned credits greater than a third threshold; and

directing communication to a sector from said determined sectors with the highest of said assigned credits.

13. (Original) The method as claimed in claim 12 further comprising directing communication to a sector from said determined sectors with the highest processed signal value when at least two of said determined sectors have equal highest assigned credits.

14. (Original) The method as claimed in claim 12 further comprising directing communication to a sector from said determined sectors with the highest forward link quality metric when at least two of said determined sectors have equal highest assigned credits.

15. (Original) The method as claimed in claim 12 further comprising remaining in communication with the current serving sector otherwise.

16. (Currently Amended) An apparatus for directing communication between a subscriber station and a plurality of sectors in a data communication system, comprising:

a processor; and

a storage medium coupled to the processor and containing a set of instructions executable by the processor to:

determine at the subscriber station a forward link quality metric for each sector in the subscriber station's list;

determine at the subscriber station a quality related to a reverse link quality metric for each sector in the subscriber station's list; and

direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric,

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wherein said processor is configured to direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric by executing a set of instructions to:

assign credits to each sector in the subscriber station's list except a current serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric; and

direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits, and

wherein said processor is configured to assign credits to each sector in the subscriber station's list except a current serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric by executing a set of instructions to:

compare a forward link quality metric for a non-serving sector with a forward link quality metric for the current serving sector modified by a first threshold;

compare a quality related to a reverse link quality metric of the non-serving sector with a second threshold;

compare a quality related to a reverse link quality metric of the current serving sector with the second threshold; and

determine whether to increase or decrease credits of the non-serving sector in accordance with results of said comparisons.

17. (Original) The apparatus as claimed in claim 16, wherein said data communication system comprises a wireless data communication system.

18. (Original) The apparatus as claimed in claim 16, wherein said processor is configured to determine at the subscriber station a quality metric of a forward link for each sector in the subscriber station's list by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of the forward link.

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19. (Original) The apparatus as claimed in claim 18, wherein said processor is configured to measure a signal-to-noise-and-interference-ratio of the forward link by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of a pilot signal on the forward link.

20. (Original) The apparatus as claimed in claim 19, wherein said processor is configured to measure a signal-to-noise-and-interference-ratio of a pilot signal on the forward link by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of a non-continuous pilot signal on the forward link.

21. (Original) The apparatus as claimed in claim 16, wherein said processor is configured to determine a quality related to a reverse link quality metric for each sector in the subscriber station's list by executing a set of instructions to:

ascertain at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list; and

process at the subscriber station said ascertained first signal value for the each sector in the subscriber station's list.

22. (Original) The apparatus as claimed in claim 21, wherein said processor is configured to ascertain at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list by executing a set of instructions to ascertain at the subscriber station a reverse power control bit at a reverse power control channel of the forward link for each sector in the subscriber station's list.

23. (Original) The apparatus as claimed in claim 21, wherein said processor is configured to process at the subscriber station said ascertained first signal value for each sector in the subscriber station's list by executing a set of instructions to filter said ascertained signal value by a filter with a pre-determined time constant.

24. (Cancelled)

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25. (Cancelled)

26. (Currently Amended) The apparatus claimed in claim ~~[[25]]~~ 16, wherein said processor is configured to determine whether to increase or decrease credits of the non-serving sector in accordance with results of said comparisons by executing a set of instructions to:

increase credits of the non-serving sector by a first pre-determined amount if:

the quality related to a reverse link quality metric of the non-serving sector is less than the second threshold and the quality related to a reverse link quality metric of the current serving sector is greater than the second threshold; or if:

the quality related to a reverse link quality metric of the non-serving sector is less than the second threshold and the quality related to a reverse link quality metric of the current serving sector is less than the second threshold and the forward link quality metric for the non-serving sector is greater than the forward link quality metric for the current serving sector modified by the first threshold; and

decrease credits of the non-serving sector by a second pre-determined amount if:

the forward link quality metric for the non-serving sector is less than the forward link quality metric for the current serving sector modified by a first threshold; or if:

the quality related to a reverse link quality metric of the non-serving sector is greater than the second threshold.

27. (Currently Amended) The apparatus claimed in claim ~~[[24]]~~ 16, wherein said processor is configured to direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits by executing a set of instructions to:

determine sectors with said assigned credits greater than a third threshold; and

direct communication to a sector from said determined sectors with the highest of said assigned credits.

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28. (Original) The apparatus as claimed in claim 27 wherein the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from said determined sectors with the highest processed signal value when at least two of said determined sectors have equal highest assigned credits.

29. (Original) The apparatus as claimed in claim 27 wherein the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from said determined sectors with the highest forward link quality metric when at least two of said determined sectors have equal highest assigned credits.

30. (Original) The apparatus as claimed in claim 27 wherein the set of instructions executable by the processor to further comprises a set of instructions to remain in communication with the current serving sector otherwise.

31. (Currently Amended) An apparatus for directing communication between a subscriber station and a plurality of sectors in a data communication system, comprising:

means for determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list;

means for determining at the subscriber station a quality related to a reverse link quality metric for each sector in the subscriber station's list; and

means for directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric;

wherein said means for directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric further comprises:

means for assigning credits to each sector in the subscriber station's list except a current serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric; and



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means for directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with said assigned credits, and

wherein said means for assigning credits to each sector in the subscriber station's list except a current serving sector in accordance with said determined forward link quality metrics and said determined qualities related to a reverse link quality metric further comprises:

means for comparing a forward link quality metric for a non-serving sector with a forward link quality metric for the current serving sector modified by a first threshold;

means for comparing a quality related to a reverse link quality metric of the non-serving sector with a second threshold;

means for comparing a quality related to a reverse link quality metric of the current serving sector with the second threshold; and

means for determining whether to increase or decrease credits of the non-serving sector in accordance with results of said comparisons.

Claims 32 – 98 (Cancelled)